

## ADITYA ENGINEERING COLLEGE

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Aditya Nagar, ADB Road, Surampalem - 533437, Near Kakinada, E.G.Dt., Ph:99498 76662

## Program Name: M.Tech. in Petroleum Engineering

Syllabus Revision for the Academic Year 2019-2020						
S.No Semester		Course Code	Course Name	% of content revised for the existing year		
1	I	192PE1T01	Offshore Drilling.	0		
2	I	192PE1T02	Fundamentals of Petroleum Geology and Reservoir Engineering. (NON-PE stream)	0		
3	I	192PE1T03	Reservoir Stimulation (PE stream)	0		
4	I	192PE1T04	Petroleum Well Drilling and Production Engineering. (NON-PE stream)	0		
5	I	192PE1E01	Advanced Numerical Methods and Applied Statistics	0		
6	I	192PE1E02	CBMand Shale Gas Engineering	100		
7	I	192PE1E03	Transportation of Oil and Gas	100		
8	I	192PE1E04	Advanced Well Logging Techniques and Well Testing Analysis	100		
9	I	192HS1T01	Research Methodology and IPR	100		
10	I	192PE1L01	Advanced Numerical Methods and	0		
11	I	192PE1L02	Drilling Simulation Laboratory	100		
12	П	192PE2T05	Artificial Lift Techniques	0		
13	п	192PE2T06	Reservoir Modeling and Simulation	0		
14	п	192PE2E05	Advanced EOR Techniques	100		
15	п	192PE2E06	Advanced Well Completions	100		
16	II	192PE2E07	Flow Assurance	0		
17	п	192PE2E08	Advanced Horizontal Well Technology	100		
18	П	192PE2L03	Reservoir Simulation Laboratory	0		
19	II	192PE2L04	Flow Assurance Laboratory PRINCIPA	100		

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S.No	Semester	Course Code	Course Name	% of content revised for the existing year
20	п	192PE2P01	Mini Project with Seminar	0
21	1&11	192MC1A01/ 192MC2A01	English for Research Paper Writing	100
22	1 & 11	192MC1A02/ 192MC2A02	Disaster Management	100
23	I & II	192MC1A03/ 192MC2A03	Sanskrit for Technical Knowledge	100
24	I & II	192MC1A04/ 192MC2A04	Value Education	100
25	I & II	192MC1A05/ 192MC2A05	Constitution of India	100
26	I & II	192MC1A06/ 192MC2A06	Pedagogy Studies	100
27	I & II	192MC1A07/ 192MC2A07	Stress Management by Yoga	100
28	I & II	192MC1A08/ 192MC2A08	Personality Development through Life Enlightenment Skills	100
29	I & II	192MC1A09/ 192MC2A09	Soft Skills	100
30	Ш	172PE3C01	Comprehensive Viva-Voce	0
31	ш	172PE3R01	Seminar - I	0
32	IV	172PE4R02	Seminar - II	0
33	IV	172PE3R02	Project Work Part I	0
34	IV	172PE4R01	Project Work Part II	0

Total number of courses in the academic year 2019-2020	= 34
courses having revision in syllabus content >/= 20% in the academic year 2019-2020	= 18
e of syllabus revision carried out in the academic year 2019-2020 = (18/34)*100	= 52.94%
	courses having revision in syllabus content >/= 20% in the academic year 2019-2020

Program Coordinator

PRINCIPAL
Aditya Engineering College
SURAMPALEM He

Head of the Department

Head of the Department - Introduce Tachnalagy

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#### Department of Petroleum Technology

Date: 24-07-2019

#### Minutes of the IV meeting of BOS scheduled on 20-07-2019

The IV meeting of the BOS of PT was held virtually on 20-07-2019 at 9.30 AM through Microsoft Teams. Prof R .Giri Prasad, Chairperson presided over the meeting.

#### Agenda 4.1: Welcome address by Chairperson-BOS

Dr. R. Giri Prasad, BOS Chairperson invited the distinguished members of BOS to the IV BOS Meeting.

#### Agenda 4.2: Ratification of minutes of the previous Board of Studies meeting

The BOS members have ratified the points discussed in the previous Board of Studies meeting held on 21-11-2017.

Agenda 4.3: Discussion and ratification of the Vision and Mission of the department and Program Educational Objectives (PEOs), Program Outcomes (POs) and Program Specific Outcomes (PSOs) of the Programs under the Department.

The BOS members have ratified the Vision and Mission of the department and Program Educational Objectives (PEOs), Program Outcomes (POs) and Program Specific Outcomes (PSOs) of the Programs under the Department.

Agenda 4.4: Discussion on proposed AR19 B. Tech (PT) Program structure, AR19 B. Tech (PT) Program – I & II semesters syllabus and ratification of the same.

The BOS members have ratified the AR19 B. Tech (PT) Program structure, AR19 B. Tech (PT) Program – I & II semesters syllabus

The committee has suggested a few minor modifications in the course content of VI, VII and VIII semester B. Tech AR19 and III and IV semester Honor and Minor degree B. Tech AR20 and approved the same.

- 1. BOS members expressed that the names of the courses in AR20 can be changed as
  - Geology and sedimentology to principles for Petroleum Engineers and Corresponding lab
  - 2) Chemical Process calculations to Material and Energy Balance
  - 3) Momentum Transfer to Fluid Mechanics for Petroleum Engineers and corresponding lab
  - 4) Process Heat Transfer to Heat transfer operations and corresponding lab
- 2. BOS members expressed that Unit-V- palynology and its importance in oil exploration in Principles of Geology for Petroleum Engineers.

- 3. BOS members suggested minor courses
  - 1. Fundamentals of Earth Science.
  - 2. Principles of Petroleum Geophysics
  - 3. Petroleum Geochemistry
  - 4. EIA of Oil Field Development
- 4. BOS members suggested Honor courses
  - 1. Well site Operations
  - 2. Drilling Fluids and Cementation for HPHT wells.
  - 3. Oil and Gas Management
  - 4. Phase Equilibrium for Petroleum Engineers.

Agenda 4.5: Discussion on proposed AR19 M. Tech (PE) Program structure, AR19 M. Tech (PE) Program – I & II semesters syllabus and ratification of the same.

The BOS members have ratified the AR19 M. Tech (PE) Program structure, AR19 M. Tech (PE) Program – I & II semesters syllabus.

Agenda4.6: Discussion on the courses having focus on employability/entrepreneurship/skill development in the programs of B. Tech (PT), M. Tech (PE) and ratification of the same.

The BOS members have ratified the courses having focus on employability/entrepreneurship/skill development in the programs of B. Tech (PT), M. Tech (PE).

Agenda 4.7: Discussion on the new courses offered in the B. Tech (PT), M. Tech (PE) programs and ratification of the same.

The BOS members have ratified the new courses offered in the B. Tech (PT), M. Tech (PE) programs. The percentage of new courses introduced in the academic year 2019-2020 for B. Tech (PT) is 9.3% and M. Tech (PE) is 57.57%. The list of new courses is enclosed as Annexure-I.

Agenda 4.8: Discussion on the B. Tech (PT), M. Tech (PE), programs in which Choice Based Credit System (CBCS)/elective course system is being implemented and ratification of the same.

The BOS members have ratified the B. Tech (PT), M. Tech (PE) programs in which Choice Based Credit System (CBCS)/elective course system.

Agenda 4.9: Discussion on the value-added courses offered for students and ratification of the same.

The BOS members have ratified the value-added courses offered for students.

Agenda 4.10: Discussion on the percentage of syllabus revision done in B. Tech (PT) & M. Tech (PE) programs in comparison with the previous regulations and ratification of the same.

The BOS members have ratified the percentage of syllabus revision done in the B. Tech (PT) & M. Tech (PE) programs. The percentage of courses revised in this academic year 2019-2020 for B. Tech (PT) is 18.06% and M. Tech (PE) is 52.94 %. The list of courses revised is enclosed as Annexure-II

#### Agenda 4.11: Analysis of Results

The BOS Chairperson presented the even and the odd semesters pass percentage for the A.Y.2018-2019. The BOS members noted the same and appreciated the faculty.

#### Agenda 4.12: Analysis of Students Feedback & Action Taken Report.

The BOS members have discussed regarding analysis of Students Feedback & Action Taken Report.

#### Agenda 4.13: Analysis of Stakeholder's Feedback on Curriculum

The BOS chairperson presented the feedback on curriculum from stake holders. The BOS members noted the same and approved the feedback on curriculum. The Action Taken Report on Stakeholders Feedback is enclosed as Annexure-III.

#### Agenda 4.14: Any other item/s

- 1. BOS members expressed that introduced few courses with industry support in future.
- 2. BOS members appreciated Skill Oriented Courses in AR 20 Regulations.
- 3. BOS members expressed that to introduce oil and gas industry software related courses in professional Core.

#### Agenda 4.15: Scheduling of the next BOS meeting.

The next BOS meeting is tentatively scheduled in the month of December 2019.

#### Agenda 4.16: Vote of Thanks

Dr. R. Giri Prasad, BOS Chairperson presented the Vote of thanks.

**BOS** Chairperson

Head of the Department
Department of Petroleum Technology
Aditya Engineering College

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# Department of Petroleum Technology Annexure-I List of New Courses in the Academic Year 2019-2020

S. No	Program	Semester	Course Code	Course Name
1.	B. Tech (PT)	I	191MC1A02	Constitution of India
2.	B. Tech (PT)	II	191PR2P01	Engineering Exploration Project
3.	B. Tech (PT)	II	191ES2L13	Petroleum Technology Workshop
4.	B. Tech (PT)	V	171HS5T06	Employability Skills - II
5.	B. Tech (PT)	V	171PT5E01	Well Engineering & Design
6.	B. Tech (PT)	VI	171PT6E05	Storage & Transportation of Crude Oil and Natural Gas.
7.	B. Tech (PT)	VI	171HS6T07	Employability Skills - IV
8.	B. Tech (PT)	VIII	R164227A	Shale Gas Reservoir Engineering
9.	M. Tech (PE)	I	192PE1E02	CBM& Shale Gas Engineering
10.	M. Tech (PE)	I	192PE1E03	Transportation of Oil and Gas
11.	M. Tech (PE)	I	192PE1E04	Advanced Well Logging Techniques & Well Testing Analysis
12.	M. Tech (PE)	I	192HS1T01	Research Methodology and IPR
13.	M. Tech (PE)	I	192PE1L02	Drilling Simulation Laboratory
14.	M. Tech (PE)	II	192PE2E05	Advanced EOR Techniques
15.	M. Tech (PE)	II	192PE2E06	Advanced Well Completions
16.	M. Tech (PE)	II	192PE2E08	Advanced Horizontal Well Technology
17.	M. Tech (PE)	II	192PE2L04	Flow Assurance Laboratory
18.	M. Tech (PE)	I/II	192MC1A01/ 192MC2A01	English for Research Paper Writing
19.	M. Tech (PE)	I/II	192MC1A02/ 192MC2A02	Disaster Management
20.	M. Tech (PE)	I/II	192MC1A03/ 192MC2A03	Sanskrit for Technical Knowledge

M. Tech (PE)	I/II	192MC1A04/ 192MC2A04	Value Education
M. Tech (PE)	I/II	192MC1A05/ 192MC2A05	Constitution of India
M. Tech (PE)	I/II	192MC1A06/ 192MC2A06	Pedagogy Studiess
M. Tech (PE)	I/II	192MC1A07/ 192MC2A07	Stress Management by Yoga
M. Tech (PE)	I/II	192MC1A08/ 192MC2A08	Personality Development through Life Enlightenment Skills
M. Tech (PE)	I/II	192MC1A09/ 192MC2A09	Soft Skills
M. Tech (PE)	I/II	192MC1A01/ 192MC2A01	English for Research Paper Writing
	M. Tech (PE)  M. Tech (PE)  M. Tech (PE)  M. Tech (PE)  M. Tech (PE)	M. Tech (PE) I/II  M. Tech (PE) I/II  M. Tech (PE) I/II  M. Tech (PE) I/II  M. Tech (PE) I/II	M. Tech (PE)  M. Tech (PE)  I/II  192MC2A04  M. Tech (PE)  I/II  192MC1A05/ 192MC2A05  M. Tech (PE)  I/II  192MC1A06/ 192MC2A06  M. Tech (PE)  I/II  192MC1A07/ 192MC2A07  M. Tech (PE)  I/II  192MC1A08/ 192MC1A08/ 192MC2A08  M. Tech (PE)  I/II  192MC1A09/ 192MC1A09/ 192MC2A09

BOS Chairperson

Head of the Department
Department of Petroleum Technology
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#### Department of Petroleum Technology

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#### Annexure-II

#### List of Courses Revised in the Academic Year 2019-2020

S. No	Program	Semester	Course Code	Course Name
1.	B. Tech (PT)	I	191HS1T01	Communicative English
2.	B. Tech (PT)	I	191BS1T01	Differential Equations and Linear Algebra
3.	B. Tech (PT)	I	191BS1T02	Engineering Physics
4.	B. Tech (PT)	I	191BS1L01	Engineering Physics Lab
5.	B. Tech (PT)	I	191MC1A01	Environmental Science
6.	B. Tech (PT)	П	191BS2T05	Partial Differential Equations and Vector Calculus
7.	B. Tech (PT)	II	191BS2T06	Chemistry of Materials
8.	B. Tech (PT)	II	191BS2L04	Engineering Chemistry Lab

**BOS** Chairperson

Head of the Department Department of Petroleum Technology Aditya Engineering College SURAMPALEM-533 437

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#### Department of Petroleum Technology Annexure III

Action Taken Report on Stakeholders Feedback in the Academic Year 2019-2020

S. No Agenda Item No.		Stakeholders Recommended	Action Taken	
1.	4.14	Employer Incorporation of more industry oriented courses to improve the student employability and knowledge of current industrial trends	Introduction of new courses like well engineering and mud logging	
2.	4.14	Students should be encouraged to gain lifelong learning skills through MOOCs.	Students are encouraged to take SWAYAM courses in accordance with discussions with deans.	
3.	4.4	It is better that if the student having lack of application of knowledge in the theoretical aspects and real world project based learning.	According to the feedback given, Engineering Exploration project will be introduced to the curriculum once after the discussion made with Professionals and experts.	
4.	4.8	Students need to be industry ready with skill sets to gain job.	As per suggestion, additional skill programs in association with APSSDC will be initiated to make the student with technical skill.	
5.	4.5	Better to have knowledge on MAT LAB and its applications	According to the suggestion, will be taught in the curriculum once after the discussion made with dean academics.	
6.	4.5	Increase industrial training practically	Internship is made mandatory and thereby the students should take the industry training and to implement a project as part of Internship.	
7.	4.8	It is better to add additional skill oriented programs to get core jobs.	As per suggestions received value added courses will be initiated	
8.	4.8	It is better to acquire more advanced and better skills	As per discussions with dean academic some courses implemented as elective courses.	

9.	4.4	Suggested that Projects are to be developed and designed by the students that serves the social needs.	As per discussions with dean academics will be included in the curriculum.
10.	4.4	It is better student have basic knowledge on how it is implemented.	According to the feedback given, Engineering Exploration project will be introduced to the curriculum once after the discussion made with Professionals and experts.
11.	4.6	Employer Incorporation of more industry oriented courses to improve the student employability and knowledge of current industrial trends	As per suggestions and discussions introduction of new courses like advanced well logging techniques implemented
12.	4.8	Better to keep Interdisciplinary elective courses in syllabus	Dean academics has noted and kept in syllabus
13.	4.14	It is better to Increase industrial training practically	Internship is made mandatory and thereby the students should take the industry training and to implement a project.
14.	4.4	It is better to introduce more advanced courses	As per suggestions and discussions with dean academics some courses implemented in elective courses.
15.	4.14	It is better to add additional skill oriented programs to get core jobs.	As per suggestions received CBM and shale gas courses will be initiated

**BOS Chairperson** 

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